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\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* \* SESSION RESUMED IN FILE 'REGISTRY' AT 13:34:21 ON 22 MAR 2007 FILE 'REGISTRY' ENTERED AT 13:34:21 ON 22 MAR 2007 COPYRIGHT (C) 2007 American Chemical Society (ACS)

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.45 175.36

1"|1

FULL ESTIMATED COST

Uploading C:\Program Files\Stnexp\Queries\10541108IIa.str

|\*|-

chain nodes :

7 8 9 10 11 12 13 16 17 21 22

ring nodes : 1 2 3 4 5

chain bonds :

1-21 2-7 7-8 7-9 8-10 10-11 11-12 12-13 13-22 16-17

ring bonds :

1-2 1-5 2-3 3-4 4-5

exact/norm bonds :

G1:S,CH2

G2:N,[\*1]

Young, Shawquia, Page 1

G3:H,CN

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS

11:CLASS 12:CLASS 13:CLASS 16:CLASS 17:CLASS 21:CLASS 22:Atom

Generic attributes :

22:

Type of Ring System : Polycyclic

STRUCTURE UPLOADED L4

=> d 14

L4 HAS NO ANSWERS

L4

STR

1 ANSWERS

G1 S,CH2

G2 N, [@1]

G3 H, CN

Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 13:34:51 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 24578 TO ITERATE

8.1% PROCESSED

2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

1 SEA SSS SAM L4

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

482180 TO 500940

PROJECTED ANSWERS:

35 TO

L5

=> s 14 full

Young, Shawquia, Page 2

FULL SEARCH INITIATED 13:34:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 491875 TO ITERATE

97.8% PROCESSED 481002 ITERATIONS

153 ANSWERS

100.0% PROCESSED 491875 ITERATIONS

153 ANSWERS

SEARCH TIME: 00.00.19

16 152

153 SEA SSS FUL L4

=> file hcaplus
COST IN U.S. DOLLARS

SINCE FILE

TOTAL

•

ENTRY

SESSION

FULL ESTIMATED COST

172.55 347.46

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FILE COVERS 1907 - 22 Mar 2007 VOL 146 ISS 13 FILE LAST UPDATED: 21 Mar 2007 (20070321/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16

L7

20 L6

=> d ed abs ibib hitstr 1-20

ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2007 ACS ON STN Entered STN: 02 Nov 2006

The invention relates generally to pyrrolidine and thiazolidine DPP-IV inhibitory compds. A-B-CO-D (A is a bicyclic or tricyclic ring system attached to B at carbon or nitrogen; B is a linking group such as an

actached to B at carbon or nitrogen; B is a linking group such as an amino

acid residue or fragment; D is a pyrrolidine or thiazolidine residue or derivative), including isomers and pharmaceutically-acceptable salts, for treatment of DPP-IV mediated diseases, in particular, type-2 diabetes. Thus, pyrrolidinecarbonitrile derivative I was prepared by reaction of 5-[(S)-2-aminopropyl)-10,11-dihydro-5H-dibenzo(a,d)cycloheptene-5-carboxamide with N-glyoxyloyl-L-prolinecarbonitrile (prepns. given) and showed Ki < 6 nM for inhibition of DPP-IV.

ACCESSION NUMBER: 2006:1147258 HCAPLUS

DOCUMENT NUMBER: 145:471864

Preparation of multicyclic peptide derivatives as dispetidy) peptidase-IV inhibitors

Kroth, Heiko; Feuerstein, Tim; Richter, Frank; Boer, Jurgen; Ensers, Michael; Nolte, Bert; Schneider, Matchias; Hochguertel, Matthias; Frickel, Fritz-Prieder; Taveras, Arthur

PATENT ASSIGNEE(S): Alance Pharmaceuricals, Inc., USA PCT, Inc. Appl., 542pp.

CODEN: PIXXD2

PATENT TYPE:

DOCUMENT TYPE:

Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

> PATENT NO KIND DATE APPLICATION NO. DATE WO 2006116157
> WO 2006116157
> W: AE, AG,
> CN, CO,
> GE, GH,
> KZ, LC, A2 20061102 WO 2 A9 20070301 AL, AM, AT, AU, AZ, BA, BB, CR. CU, CZ, DE, DK, DM, DZ, GM, HR, HU, ID, IL, IN, IS, LK, LR, LS, LT, LU, LV, LY, WO 2006-US15200 20060421 BG, BR, BW, EC, EE, EG, JP, KE, KG, MA, MD, MG,

ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

2-Pyrrolidinecarbonitrile, 1-{[[2-[(6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)amino]ethyl]amino}acetyl]-, (25)

Absolute stereochemistry.

(9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SK, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UG, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GM, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, M2, NA, SD, SL, SZ, TZ, UG, ZM, ZM, AAZ, BY, KG, KZ, MD, RU, TJ, TM

US 2005270701 A1 20061130 US 2005-674151P P 20050421

PRIORITY APPLN. INFO: OTHER SOURCE(S): CASREACT 145:471864; MARPAT 145:471864
IT 913978-13-9P 913978-28-6P 913978-29-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of multicyclic peptide derivs. as dipeptidyl peptidase-IV inhibitors)
913978-13-9 HCAPLUS
5H-Dibenz[b,f]azepine, 5-[[{2-[(2S]-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]acetyl]-10,11-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

913978-28-6 HCAPLUS 2-Pyrrolidinecarbonitrile, 1-[[[2-[(8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)amino]ethyl]amino]acetyl}-, (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

Entered STN: 18 May 2006
The characterization of glycosylation in proteins by mass spectrometry (MS) is often impeded by strong suppression of ionization of opeptides in the presence of non-glycosylated peptides. Glycopeptides with a large carbohydrate part and a short peptide backbone are particularly affected by this problem. To meet the goal of generating mass spectra exhibiting glycopeptide coverages as complete as possible, derivatization of glycopeptides offers a practical way to increase their ionization yield. This paper investigated derivatization with 6-aminoquinolyl-N-hydroxysuccinimidyl carbamate (AQC) which is a rapid labeling technique commonly used for fluorescence detection in high-performance liquid chromatog. (MPLC) and capillary electrophoresis (CE). As test samples,

used peptides and glycopeptides obtained by enzymic digestion of three different glycoproteins, i.e., human antithrombin, chicken ovalbumin, and bovine  $\alpha l$ -acid-glycoprotein. It was found that AQC derivatization resulted in strongly increased signal intensities when analyzing small peptides and glycopeptides by matrix-assisted laser desorption/ionization (MADDI)-MS. For these compds, the limit of detection could be reduced to low fmol amts. Without derivatization only glycopeptides containing

peptide backbones were detected by MALDI-MS. This effect was even significant when glycopeptides were pre-separated and enriched by means

significant when glycopeptides were per-separated and enriched by means of

lectin affinity chromatog. before MALDI-MS anal. and when using electrospray ionization (ESI). This labeling method, applied in combination with MS detection for the first time, was found to be well suited for the enhancement of detection sensitivity for small glycopeptides in MALDI-MS anal. and thus for reducing the need for pre-separation steps.

ACCESSION NUMBER: 106:466926 HCAPLUS

DOCUMENT NUMBER: 145:146014

Derivatization by 6-aminoquinolyl-N-hydroxysuccinimidyl carbamate for enhancing the ionization yield of small apptides and glycopeptides in matrix-assisted laser desorption/ionization and electrospray ionization mass spectrometry

Ulner, Roman; Plematl, Alexander; Rizzi, Andreas University of Vienna, Vienna, A-1090, Austria Rapid Communications in Mass Spectrometry (2006), 20(9), 1469-1479

CODEN: ROMSEP; ISSN: 0951-4198

DOCUMENT TYPE: Journal English

ENGLANCE: Boylish English

ENGLANCE: Boylish English

ENGLANCE: Boylish English

ENGLANCE: Annual Plemation, unclassified); PRP (Properties); ANST (Analytical study); FORM (Formation, unclassified); PRP (Properties); ANST (Analytical study); FORM (Formation, unclassified); PRP (Properties); ANST (Analytical study); FORM (Formation, unclassified); PRP (Properties); ANST enhancing the ionization by aminoquinolly 1-hydroxysysuccinimidyl carbamate for enhancing the ionization yield of small peptides and glycopeptides in matrix-assisted laser desorption/ionization and electrospray ionization

zetion
mass spectrometry)
858251-34-8 HCAPLUS
L-Lysine, N-[(6-quinolinylamino)carbonyl]-L-seryl-L-prolyl-L-aglutamyl- (9CI) (CA INDEX NAME)

ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) Absolute stereochemistry

898251-35-9 HCAPLUS L-Lysine, N-{(6-quinolinylamino)carbonyl]-L-seryl-L-prolyl-L-α-glutamyl-M-6-{(6-quinolinylamino)carbonyll- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

PAGE 1-B

PAGE 1-A

898251-66-6 HCAPLUS
L-Arginine, N. - (16-quinolinylamino)carbonyl]-L-isoleucyl-L-prolyl-L-aglutamyl-L-alanyl-L-threonyl-L-asparaginyl- (9CI) (CA INDEX NAME)

ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

REFERENCE COUNT:

THERE ARE 53 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L7 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

PAGE 1-A

PAGE 1-B

898251-77-9 HCAPLUS
L-Arginine, N-[(6-quinolinylamino)carbonyl]-L-leucyl-L-prolylglycyl-L-isoleucyl-L-valyl-L-alanyl-L-a-glutamylglycyl- (9CI) (CA INDEX

Absolute stereochemistry.

PAGE 1-A

ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 09 Dec 2005

N-cyanopyrrolidinylcarbonylmethyl amino acid amides such as nonracemic N-cyanopyrrolidinylcarbonylmethyl aminomethylbutanoylisoquinoline I are prepared as dipeptidyl peptidase IV (DPP-IV) inhibitors selective for IV

Over the related enzymes DPP-8 and DPP-II for use as potential antidiabetic drugs; the in vitro and in vivo activity of I is determined Boc-protected amino acids are coupled to amines; amine deprotection and alkylation with 1-(bromoacety)-(2S)-pyrolidinecarbonitrile provides the title compds. The DPP-IV-inhibiting structure-activity relationship for

variety of N-substituted aminoacetylpyrrolidinecarbonitriles is

variety of N-substituted aminoacetylpyrrolumeuslood.

determined 1
suppresses blood glucose elevation after an oral glucose challenge in Wistor rate and also inhibits plasms DPP-IV activity for up to 4 h in BALB/c mice; the in vitro and in vivo activities of I are comparable to those of the antidiabetic agent NVP-LAF237.

ACCESSION NUMBER: 2005.1288271 HCAPLUS
DOCUMENT NUMBER: 144:184000
1TILE:
2-[3-[2-[(2S)-2-Cyano-1-pyrrolidiny1]-2-oxoethylamino]3-methyl-1-oxobutyl]- 1,2,3,4-tetrahydroisoquinoline:
A Potent, Selective, and Orally Bioavailable
Dipeptide-Derived Inhibitor of Dipeptidyl Peptidase

IV

AUTHOR(S): Shiow-Ju;

Tsu, Hsu; Chen, Xin; Chen, Chiung-Tong; Lee,

Chang, Chung-Nien; Kao, Kuo-His; Coumar, Mohane Selvaraj; Yeh. Yen-Ting; Chien, Chie-Hui; Wang, Hein-Sheng; Lin. Ke-Ta; Chang, Ying-Ying; Wu,

Seu-Hui;

Chen, Yuan-Shou; Lu, I-Lin; Wu, Su-Ying; Tsai, Ting-Yueh; Chen, Wei-Cheng; Hsieh, Hsing-Pang; Chao, Yu-Sheng; Jiaang, Weir-Torn Division of Biotechnology and Pharmaceutical

CORPORATE SOURCE:

Research,

SOURCE: Journal of Medicinal Chemistry (2006), 49(1), 373-380

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:184000

IT 739366-79-1P 739366-97-3P 739367-07-8P

739367-71-6P 874942-88-P 874942-42-4P

ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological atudy); PREP (Preparation) (prepn. of cyanopyrrolidinylcarbonylmethyl-substituted amino acid amides as selective inhibitors of dipeptidyl peptidase IV for

use as antidiabetic agents)
739366-79-1 HCAPLUS
1H-Isoindole, 2-[3-[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3methyl-1-oxobutyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

739366-97-3 MCAPLUS
Isoquinoline, 2-{3-{(2-{(25)-2-cyano-1-pyrrolidiny1)-2-oxoethy1]amino}-3-methy1-1-oxobuty1]-1,2,3,4-tetrahydro-(9CI) (CA INDEX NAME)

### Absolute stereochemistry.

739367-07-8 HCAPLUS
1H-Isoindole, 2-{3-{[2-{(2S)^-2-cyano-1-pyrrolidiny1]-2-oxoethy1}amino]-1-oxoproyp1]-2\_3-dihydro- [9CI) (CA INDEX NAME)

### Absolute stereochemistry.

739367-71-6 HCAPLUS
Isoquinoline, 2-[[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]acetyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

### ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

874942-41-3 HCAPLUS
Immountainen, 2-[3-[(2-{(25)-2-cyano-1-pyrrolidiny1)-2-oxoethy1]amino}-3-methy1-1-oxobuty1]-6-fluoro-1,2,3,4-tetrahydro-(9CI) (CA INDEX NAME)

874942-42-4 HCAPLUS
Isoquinoline, 2-{3-{{2-{1-{2-{2-cyano-1-pytrolidiny1}-2-oxoethy1}amino}-3-methy1-1-oxobuty1}-6,8-difluoro-1,2,3,4-tetrahydro- (9CI) (CA INDEX

### Absolute stereochemistry

REFERENCE COUNT:

THERE ARE 50 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

874942-38-8 HCAPLUS
Isoquinoline, 2-{4-{{2-{(2S)-2-cyano-1-pyrrolidinyl}-2-oxoethyl}amino}-1-oxobutyl}-1,2,3,4-tetrahydro-{9CI} (CA INDEX NAME)

### Absolute stereochemistry.

874942-39-9 HCAPLUS
IBOQUINOline, 2-((35)-3-([2-[(25)-2-cyano-1-pyrrolidinyl]-2oxoethyl]amino[-1-oxobutyl]-1,2,3,4-tetrahydro- (9C1) (CA INDEX NAME)

#### Absolute stereochemistry.

874942-40-2 HCAPLUS
Isoquinoline, 2-[(3R)-3-[[2-[(2S)-2-cyano-1-pyrrolidiny1]-2oxoethyllamino]-4-methyl-1-oxopentyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
Entered STN: 20 Oct 2005
The present invention discloses methods and compns. for targeted delivery of active agents and detection of bioactivity for therapeutic or other medical uses. Detectable compns. comprise detectable constructs comprising a detectable agent. Due to the actions of a specific bioactivity in vivo or in vitro, the detectable construct is altered in some manner so that the detectable agent is detected. The present invention provides diagnostic imaging agents such as for MRI and optical imaging, which are used for sensitive detection of a specific bioactivity within a tissue. The present invention comprises methods and compns. for biocleavable or biodegradable compns for carrying and releasing active agents for therapeutic or other medical uses. The methods and compns of the present invention further comprise micelle compns. The active agents of the present invention further comprise micelle compns. The active agents of the present invention may comprise drugs, vaccines, and imaging te.

2005:1126596 HCAPLUS

agents.
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:

2005:126596 HAAPLUS
143:427346
Methods and compositions for imaging and biomedical applications
Murthy, Niren; Hao, Jihua; Guinn, Amy R.; Yang, Stephen C.; Hefferman, Michael J.
Georgia Tech Research Corporation, USA
PCT Int. Appl., 63 pp.
CODEN: PIXXD2
Patent

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
		<b>-</b>				-									-		
WO 2005096789				A2		20051020		WO 2005-US12571						20050412			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA.	CH.
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG.	ES,	FI.	GB.	GD.
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG.	KM,	KP.	KR.	KZ.
		LC,	LK,	LR,	LS,	LT,	LU,	LV.	MA,	MD,	MG,	MK,	MN.	MW,	MX.	MZ.	NA.
		NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	sc,	SD,	SE,	SG,	SK,	SL,
							TR,										
		ZM,															
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	Rυ,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE.	DK.
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC.	NL,	PL.	PT.
		RO,	SE,	SI,	БK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN.	GQ,	GW.	ML.
		MR,	NE,	SN,	TD,	TG											
ORITY	APP	LN.	INFO	. :					1	US 2	004 -	5613	17P		P 2	0040	412

PRIO

US 2004-617550P P 20041008

US 2005-658050P P 20050302

867346-60-9P
RL: DNN, (Diagnostic use); SPN (Synthetic preparation); BIOL (Biological atudy); PREP (Preparation); USES (Uses) (targeted delivery of active agents and detection of bioactivity for therapeutic or other medical uses) (S7346-60-9 HCAPLUS Poly(oxy-1,2-ethanediy1), u-hydro-u-hydroxy-, ether with dihydrogen aqua [N-[2-[bis[(carboxy-kO]methy1]amino-kN]-3-[4-[[[(2-

ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) hydroxyethyl)amino]thioxomethyl]amino]phenyl]propyl]g]ycinato(5-)- $\kappa$ N,  $\kappa$ O]gadolinate(2-) and hydrogen aqua[N-[3-[3-[4-[(2-[-1.5] km - 1.5] km - 1.5] km - 1.5] km - 1.5] km - 1.5]

hydroxyethyl)amino)-4-iminobutyl]-2,5-dioxo-1-pyrrolidinyl]-1-oxopropyl]-L-seryl-L-arginyl-L-tryptophyl-L-leucyl-L-alanyl-L-leucyl-L-prolyl-N-[2-[[bis (Carboxy-KO)methyl]amino-KN]ethyl]amino-KN]ecetyl-Ko]amino]ethyl]-L-argininamidato(4-)]dysprosate(1-)
(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-C

PAGE 1-D

ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
Entered STN: 20 Oct 2005
The synthesis and characterization of the first fluorescent prolyl
oligopentidase inhibitor 4-fluoresceinthiocarbamoyl-6-aminocaproyl-Lprolyl-2(S)-(hydroxyacetyl)pyrrolidine is described. This compound has

an ICSO = 0.83 nM and a dissociation half-life of 160 min, and its fluorescence signal is detectable using standard filters for fluorescein. These properties make this compound a suitable probe for visualizing prolyl oligopeptidase in various applications.

ACCESSION NUMBER: 2005:1122050 HCAPLUS
DOCUMENT NUMBER: 144:36498
TITLE: Synthesis and Characterization of the Novel Fluorescent Prolyl Oligopeptidase Inhibitor

AUTHOR(S):

2005:1122050 HCAPLUS
144:36498
Synthesis and Characterization of the Novel
Fluorescent Prolyl Oligopeptidase Inhibitor
4-Fluoresceinthiocarbamoyl-6-aminocaproyl-L-prolyl2(S)-(Hydroxyacetyl)pyrrolidine
Venaelaeinen, Jark

T. CORPORATE SOURCE:

Department of Pharmacology and Toxicology, University of Kuopio, Kuopio, FI-70211, Finland Journal of Medicinal Chemietry (2005), 48(23), 7093-7095
CODEN: JMCMAR; ISSN: 0022-2623
American Chemical Society
Journal English
CASREACT 144:36498 SOURCE:

CODEN: JMCNAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:36498

IT 870753-82-5P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation)
(preparation and biol. activity of fluorescent peptides as inhibitors

prolyl oligopeptidase)
870753-82-5 HCAPLUS
Pyrrolidine, 1-[[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]amino]thioxomethyl]amino]acetyl]-2-[[(25)-2-(hydroxyacetyl)-1-pyrrolidinyl]csrbonyl]-, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT

THERE ARE 27 CITED REFERENCES AVAILABLE FOR

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN US 2003-659860 (Continued) A2 20030911

> US 2004-788993 A2 20040227

OTHER SOURCE(S): MARPAT 143:347048
IT 676560-65-9P 676560-68-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of cyanopyrrolidine derivs. and pharmaceutical compns.

eot
as inhibitors of dipeptidyl peptidase-iv (dpp-iv))
676560-65-9 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-{{[1,1-dimethyl-2-{4-quinolinylamino}ethyl]amino}acetyl]-5-ethynyl-, (2S,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

676560-68-2 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[2-(2-benzothiazolylamino)-1,1-dimethylethyl]amino]acetyl]-5-ethynyl-, (25,5R)- (9CI) (CA INDEX NAME)

Young, Shawquia, Page 8

ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 30 Sep 2005

Title compds. I (R1 = alkynyl or cyano; R2 and R3 independently = H, alkyl, alkenyl etc.; or R2 and R3 together form (un)substituted heterocycle; X = CM2, CMF, CF2), and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of dipeptidyl peptidase

(DPP-IV). Thus, e.g., II-HCl was prepared in a multistep synthesis from Me (S)-(+)-2-pyrrolidone-5-carboxylate. Ki values for DPP-IV assays of selected compds. ranged from 1-130 nM. And are useful for the prevention or treatment of diabetes, especially type II diabetes, as as

hyperglycemia, Syndrome X, hyperinsulinemia, obesity, atherosclerosis, and

ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

various immunomodulatory diseases.

SSION NUMBER: 2005:1050935 HCAPLUS

143:347048

E: Preparation of cyanopyrrolidine derivatives and pharmaceutical compositions thereof as inhibitors of dipeptidyl peptidase-iv (dpp-iv)

NTOR(S): Madar, David J.; Djuric, Stevan W.; Michmerhuizen, Melissa J.; Kopecka, Hana A.; Li, Xiaofeng; Longenecker, Kenton L.; Pei, Zhonghua; Pireh, Daisy; Sham, Hing L.; Stewart, Kent D.; Szczepankiewicz, Bruce G.; Wiedeman, Paul E.; Yong, Hong INVENTOR(S):

PATENT ASSIGNEE (S) :

U.S. Pat. Appl. Publ., 70 pp., Cont.-in-part of U.S. Ser. No. 788,993. CODEN: USXXCO Patent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005215784	A1	20050929	US 2005-36258	20050113
US 2004121964	A1	20040624	US 2003-659860	20030911
US 2004259843	Al	20041223	US 2004-788993	20040227
PRIORITY APPLN. INFO.:			US 2002-412084P P	20020919

ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 22 Sep 2005

$$N - (CR^3R^4)_n - x - (CR^5R^6)_p - y - z$$

Title compds. I [R1 = H or CN; R2-6 independently = H, halo, nitro, etc.; m = 0-5; n and p independently = 0-4; W = O, S, NR7, etc.; R7 = H, halo, alkyl, etc.; X = O, S or CR8(NR9R10); R8-10 independently = H, alkyl or aryl; Y = S, SO, CS, etc.; Z = NR1R12; R11 and R12 independently = H, alkoxyalkyl, haloalkyl, etc.] and their pharmaceutically acceptable

are prepared and disclosed as inhibitors of dipeptidyl peptidase IV (DPP-IV). Thus, e.g., II was prepared by DCC coupling of tert-butoxycarbonyl-L-glutamic acid 5-benzyl eater with pyrrolidine-2-carbonirtile hydrochloride followed by deprotection/coupling/deprotection sequence using 1,2,3,4-tetrahydro-isoquinoline in the DCC coupling step. The inhibitory activity of I towards DPP-IV was evaluated using chromogenic enzyme assays and it was found that selected compds. of the invention showed inhibitory activities (no data). I as inhibitors of DPP-IV should prove useful in the ment

L7 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2007 ACS ON STN CODEN: PIXXD2

DOCUMENT TYPE: Patent English
FAMILY ACC. NUM. COUNT: 1 (Continued) DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 087235 A1 20050922 W0 2005-US7839
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BM,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, WO 2005087235 20050309 BY, BZ, CA, CH, ES, FI, GB, GD, KP, KR, KZ, LC, MX, MZ, NA, NI, SG, SK, SL, SM, SK, SL, SM, YU, ZA, ZM, RN: BM, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CT, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG

2005221678 Al 20050922 AU 2005-221678 20050309 250559611 Al 20050922 CA 2005-2559611 20050309 2005222222 Al 2005005 US 2005-77551 20050309 1729774 Al 20061213 EP 2005-725171 20050309 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR VAPPLN. INFO:: AU 2005221678 CA 2559611 US 2005222222 EP 1729774 PRIORITY APPLN. INFO .:

US 2004-617684P P 20041012

. WO 2005-US7839 W 20050309

OTHER SOURCE(S): MARPAT 143:326200

739367-08-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of comparative compound for pyrrolidina derive. as inhibitors of

sitors of dipeptidyl peptidame IV)
739367-08-9 HCAPLUS
18oquinoline, 2-{2-{2c-cyano-1-pyrrolidinyl}-2-oxoethyl}amino]-1-oxopropyl}-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

864920-96-7P 864921-10-8P 864921-12-0P

ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
864921-13-1 HCAPLUS
3-1Boquinolinemethanol, 2-[3-[[2-[(25)-2-cyano-1-pyrrolidinyl]-2oxoethyl]amino]-1-oxopropyl]-1,2,3,4\*tetrahydro- [9CI) (CA INDEX NAME)

Absolute stereochemistry.

864921-14-2 HCAPLUS Isoquinoline, 2-[3-[[2-{[2S]-2-cyano-1-pyrrolidiny1]-2-oxoethyl]amino]-1-oxopropyl]-1-(1,1-dimethylethyl)-7-fluoro-1,2,3,4-tetrahydro- [9CI) (CA INDEX NAME)

ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) 864921-13-1P 864921-14-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrrolidine derive. as inhibitors of dipeptidyl peptidase IV)
864920-96-7 HCAPLUS
1-Isoquinolineethanol, 2-[3-{[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-6,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

864921-10-8 HCAPLUS
[Sequinoline, 2-[3-[[2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethy1]amino]-1oxopropy1]-1,2,3,4-tetrahydro-1-(1-methylethy1)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

864921-12-0 HCAPLUS
Isoquinoline, 3-[3-[(2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethy1]amino]-1-oxopropy1]-7-fluoro-1,2,3,4-tetrahydro-1-(1-methylethy1)- (9C1) (CA

INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 24 Dec 2004

The present invention relates to N-aminoacyl pyrrolidine-2-carbonitriles and related compds. (shown as 1; variables defined below; e.g. II) that inhibit disperidyl peptidase IV (DPP-IV) and are useful for the

prevention or treatment of diabetes, especially type II diabetes, as well as

or treatment of Granders, Especially, Theorems, and various Syndrome X, hyperinsulinemia, obesity, atherosclerosis, and various immunomodulatory diseases (no data). Compds. I inhibit DPP-IV induced fluorescence with inhibitory consts. 0.014-7 µM. Although the methods of preparation are not claimed, >100 example prepns. are included.

of preparation are not claimed, >100 example prepns. are included.
E.g., a
9-step synthesis of II, starting from Me (S)-(+)-2-pyrrolidone-5carboxylate, was given. For I: X = CH2, CHF and CF2: R = alkylcarbonyl,
arylcarbonyl, cyano, heterocyclylcarbonyl, R4RSNC(0)-, B(OR6]2,
1,3,2-dioxaborolane and 4,4,5,5-tetramethyl-1,3,2-dioxaborolane; R1 =
alkoxyalkyl, alkyl, alkylcarbonyl, alkenyl, alkynyl, allenyl, arylalkyl,
cycloalkylalkyl, and hydroxyalkyl. R2 and R3 = H. alkoxyalkyl, alkyl,
heterocyclylalkyl, and hydroxyalkyl. R2 and R3 = H. alkoxyalkyl, alkyl,
alkenyl, alkynyl, cycloalkylalkyl, cyallkyl, aryl, arylalkyl,
heterocycle, heterocyclealkyl, kydroxyalkyl; or R2 and R3 taken together
with the atoms to which they are attached form a mono or bicyclic
heterocycle 2-indolinyl, 2-indolyl, 3-isoquinolinyl, 2-piperazinyl,
2-piperidinyl, 2-pyrrolidinyl, 2-pyrrolyl, 2-pyrridnyl, 2-quinolinyl,
2-cetrahydroquinolinyl, and 3-tetrahydroisoquinolinyl, wherein said
heterocycle may be substituted with 0-3 alkenyl, alkoxy, alkoxyalkyl,
alkylcarbonylalkyl, alkoxyarbonylalkyl, alkyl, alkylcarbonyl,
alkylcarbonylalkyl, alkylcarbonylary, alkyluulfonyl, alkylthio, alkynyl,
arylalkoxy, arylalkoxy, arylalkyl, arylcarbonyl, hydroxy, hydroxyalkyl,
cyano, cyanoalkyl, formyl, halogen, haloslkyl, hydroxy, hydroxyalkyl,

cyano, cyanoalkyl, formyl, halogen, haloalkyl, hydroxy, hydroxyalkyl, mercapto, nitro, Ph, RARBN-, RCRDNC(O)-, and RCRDNS(O)2-. R4, R5 and R6

H, alkyl, and arylalkyl; RA and RB = alkyl, alkylcarbonyl,

alkoxycarbonyl,
alkylaulfonyl; or RA and RB taken together with the N to which they are
attached form a ring piperidine, piperazine and morpholine; and RC and RD
= H and alkyl.

2004:1127082 HCAPLUS

2004:1127082 HCAPLUS 142:74441 DOCUMENT NUMBER: TITLE: Preparation of N-aminoacyl pyrrolidine-2-carbonitriles

ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
and related compounds as inhibitors of dipeptidyl
peptidase-IV (PPP-IV) useful against type II diabetes
and other disorders
Madar, David J.; Djuric, Stevan W.; Michmerhuizen,
Melissa J.; Kopecka, Hans A.; Li, Xisofeng;
Longenecker, Kenton L.; Pei, Zhonghus; Pireh, Daisy;
Sham, Hing L.; Stewart, Kent D.; Szczepankiewicz,
Bruce G.; Wiedeman, Paul E.; Yong, Hong
USA PATENT ASSIGNEE(S): SOURCE: USA U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S. Ser. No. 659,860. CODEN: USXXCO Patent English 3 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND APPLICATION NO. DATE DATE 20040227 20041223 US 2004259843 US 2004121964 US 2005215784 PRIORITY APPLN. INFO.: US 2004-788993 20050929 US 2005-36258 US 2002-412084P P 20020919 , US 2003-659860 A2 20030911 US 2004-788993 A2 20040227 OTHER SOURCE(S): MARPAT 142:74441

IT 676560-65-9P 676560-68-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological atudy); PREP (Preparation); USES (drug candidate; preparation of N-aminoacyl pyrrolidine-2-carbonitriles and related compds. as inhibitors of dipeptidyl peptidase-IV useful nst type II diabetes and other disorders)
676560-65-9 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[1.1-dimethyl-2-{4-quinolinylamino}ethyl]amino]acetyl]-5-ethynyl-, (25,5R)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 12 Aug 2004

AB The title compds. I [wherein R1 and R2 = independently H, (un) substituted alkyl, Co2H, etc.; R3 = H-or (un) substituted aryl; R4 = H or CN; D = CONR6, CO, or NR6CO; R6 = H or (un) substituted alkyl; E = CH2, CH2CH2, CH2CH2, CH2CH2, CH2CH2, CH2CH2, CH2CH2, Or SCR2; n = 0-3; A = (un) substituted bicyclo(hetero) cyclyl] or pharmaceutically acceptable salts thereof are prepared as dispeptidyl peptidase (DPP) IV inhibitors. For example, the compound II=HCl was prepared in a multi-step synthesis. I inhibited DPP IV with IC50 of 0.02 to 0.094 µM.

ACCESSION NUMBER: 2004:648505 HCAPLUS
DOCUMENT NUMBER: 141:190794

TITLE: Preparation of arylcarboxamides as dipeptidyl peptidase IV inhibitors

Kakigami, Takuji; Oka, Mitsuru; Katoh, Noriyasu; Yoshida, Masahiro; Shirai, Masahiro; Murase, Toru; Saksiri, Masao; Yamamoto, Takayo; Takeuchi, Mitsuaki; Hayashi, Yuji; Takada, Motchiro; Makino, Mitsuahiro Sanwa Kagaku Kenkyusho Co., Ltd., Japan

POCUMENT TYPE: LANGUAGE: Japanese

TAMILY ACC. NUM. COUNT: Japanese

TAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DATE APPLICATION NO. PATENT NO. KIND DATE MO 2004067509 A1 20040812 WO 2004-JP886 20040130
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BN, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, NN, MM, MX, MZ, NA, NI
AU 2004207731 A1 20040812 AU 2004-207731 20040130
CA 2514191 A1 20040812 CA 2004-2514191 20040130
EP 1595866 A1 20040812 CA 2004-2514191 20040130
CR: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, FY,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
CN 1745063 A2 20063038 CN 2004-80003342 20040330
US 2006229286 A1 20061012 US 2006-541108 20060201
PRIORITY APPLIN, INFO: DATE OF THE CONTRACT CONTRACT CONTRACT CANNOT CAN

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ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

676560-68-2 HCAPLUS

2-Pyrrolidinecarbonitrile, 1-[[[2-(2-benzothiazolylamino]-1,1-dimethylethyl]amino]acetyl]-5-ethynyl-, (25.5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN WO 2004-JP886
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TANSWER 9 OF 20 RCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

NO 2004-JP886 A 20040130

OTHER SOURCE(S):

MARPAT 141:190794

IT 739366-82-6P 739366-80-4P 739366-81-5P
739366-82-6P 739366-80-0P 739366-81-5P
739366-82-8P 739366-83-9P 739366-80-0P
739366-82-8P 739366-83-9P
739366-91-7P 739366-92-8P 739366-93-9P
739366-91-7P 739366-92-8P 739366-93-PP
739366-91-7P 739366-91-7P 739366-99-5P
739367-00-1P 739367-91-7P 739367-11-4P
739367-59-0P 739367-10-3P 739367-11-4P
739367-59-0P 739367-80-3P 739367-11-4P
739367-59-0P 739367-70-1P 739367-71-4P
739367-71-6P 739367-78-3P 739367-73-8P
739367-83-0P 739367-78-3P 739367-91-0P
739367-83-0P 739367-90-9P 739367-91-0P
739368-06-0P 739368-01-5P 739368-02-6P
739368-06-0P 739368-01-5P 739368-02-6P
739368-17-1P 739368-13-9P 739368-14-0P
739368-17-1P 739368-13-P 739368-14-0P
739368-18-P 739368-18-P 739368-18-9-5P
739368-18-P 739368-18-P 739368-18-P 739368-18-P 739368-18-P 739368-18-P 739368-18-P 739368-18-P P 739368-18-P P 739368-18-P P 739368-18-P P 739368-18-P P 73936
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Absolute stereochemistry.

739366-80-4 HCAPLUS
1H-Isoindole, 2-[3-[{2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethyl}amino]-3-methyl-1-oxobutyl]-2,3-dihydro-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

739366-81-5 HCAPLUS
1H-Isoindole, 2-[3-[[2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-5-fluoro-2,3-dihydro- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

739366-82-6 HCAPLUS
1H-Isoindole, 5-bromo-2-{3-[{2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethyl}amino]-3-methyl-1-oxobutyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

739366-83-7 HCAPLUS
1H-Isoindole, 5-chloro-2-[3-[[2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethyl]amino[-3-methyl-1-oxobutyl]-2,3-dihydro- (9CI) (CA INDEX NAME) RN CN

#### Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

N 739366-88-2 HCAPLUS N 1H-Isoindol-4-ol, -[3-[[2-[(25)-2-cyano-1-pyrrolidiny1]-2-oxoethyllamino]-3-methyl-1-oxobutyl}-2,3-dihydro- (9CI) (CA INDEX NAME)

739366-89-3 HCAPLUS
1H-Isoindole-5-methanol, 2-[3-[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

# Absolute stereochemistry.

739366-90-6 HCAPLUS
1H-Isoindole, 2-[3-[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-2,3-dihydro-5-(trifluoromethyl)- (9CI) (CA INDEX

### Absolute stereochemistry.

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ANSWER 9 OP 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
739366-84-8 HCAPLUS
1H-Isoindole, 2-[3-[[2-{(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3methyl-1-oxobutyl]-5-(1,1-dimethylethyl)-2,3-dihydro- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

739366-85-9 HCAPLUS
1H-Isoindole, 2-[3-[(2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-4-fluoro-2,3-dihydro- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

739366-86-0 HCAPLUS
1H-Isoindole, 2-[3-[(2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-2,3-dihydro-4-methyl- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

### Absolute stereochemistry.

- L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
  RN 739366-91-7 HCAPLUS
  CN 1H-Isoindole,
  4.5.6,7-tetrachloro-2-[3-[{2-((2S)-2-cyano-1-pyrrolidiny1]-2-cyanothyl}amino]-3-methyl-1-oxobutyl}-2,3-dihydro- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

739366-92-8 HCAPLUS

1H-Isoindole, 5,6-dichloro-2-[3-{[2-{(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobucyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

RN 739366-93-9 HCAPLUS
CN 1H-1moindol-4-ol,
2-[3-[[2-([25]-2-cyanno-1-pyrrolidiny1]-2-oxoethy1]amino]3-methyl-1-oxobutyl]-2,3-dihydro-6-methyl- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

739366-94-0 HCAPLUS
1H-Isoindole, 2-[3-[2-[(25)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-2,3-dihydro-4-methoxy-6-methyl- (9CI) (CA INDEX NAME)

# Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

739366-95-1 HCAPLUS
1H-Isoindole, 2-[3-[[2-[(25]-2-cyano-1-pyrrolidiny1]-2-oxoethy1]amino]-3-methy1-1-oxobuty1]-2,3-dihydro-5-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

739366-96-2 HCAPLUS
1H-Isoindole, 2-[3-[[2-[(2S]-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-3-methyl-1-oxobutyl]-2,3-dihydro-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

739366-97-3 HCAPLUS
ISOQUIROITE, 2-[3-[2-[(25]-2-cyano-1-pyrrolidiny1]-2-oxoethy1]amino]-3-methy1-1-oxobuty1]-1,2,3,4-tetrahydro- (901) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

739367-07-8 HCAPLUS
1H-1Boindole, 2-[3-[(2-[(2S)-2-cyano-1-pyrrolidiny1]-2-oxoethy1]amino]-1-oxopropy1]-2\_3-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry

739367-08-9 HCAPLUS
Isoquinoline, 2-[3-[(25]-2-cyano-1-pyrrolidiny]]-2-oxoethyl]amino]-1-oxopropyl]-1.2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

739367-09-0 HCAPLUS
1H-Isoindole, 2-(4-[(2-[(25)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-1-oxobutyl]-2,3-dihydro- (9C1) (CA INDEX NAME)

739367-10-3 HCAPLUS
Propanamide, N-2-benzothiazolyl-3-{[2-{(2S)-2-cyano-1-pyrrolidinyl}-2-oxoethyl]amino]- (9C1) (CA INDEX NAME)

Young, Shawquia, Page 12

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

739366-98-4 HCAPLUS
1H-Isoindole, 2-[2-[(2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-2-methyl-1-oxopropyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

.RN 739366-99-5 HCAPLUS CN 1H-2-Benzazepine, 2-{2-{2-{2-{2-{(2s)-2-cyano-1-pyrrolidiny1}-2-oxoethy1}amino}-2-methy1-1-oxopropy1}-2,3,4,5-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

739367-00-1 HCAPLUS
IN-Isoindole, 2-[4-[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-4-methyl-1-oxopentyl]-2,3-dihydro- [9CI] (CA INDEX NAME)

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

739367-11-4 HCAPLUS
1H-Indole, 1-[3-[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-1-oxopropyl]- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

739367-59-0 HCAPLUS
1H-laoindole, 2-[[[2-{[2S]-2-cyano-1-pyrrolidinyl]-2-oxocthyl]amino]acetyl]-2,3-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 9 OP 20 HCAPLUS COPYRIGHT 2007 ACS on STN (
RN 739367-61-4 HCAPLUS
CN 1H-1eoindole,
2,3-dihydro-2-[([2-oxo-2-(1-pyrrolidiny1)ethy1]amino]acety1]{9C1} (CA INDEX NAME) (Continued)

739367-65-8 HCAPLUS
1H-Indole, 1-[[[2-([2S]-2-cyano-1-pyrrolidiny]]-2-oxoethyl]amino]acetyl]2,3-dihydro-(9C1) (CA INDEX NAME)

Absolute stereochemistry.

739367-66-9 HCAPLUS
1H-Indole, 2,3-dihydro-1-{{{2-oxo-2-(3-thiazolidinyl)ethyl}amino}acetyl}-(SCI) (CA INDEX NAME)

739367-67-0 HCAPLUS H-Indole 2,3-dihydro-1-[[[2-0x0-2-(1-pyrrolidinyl)ethyl]aminolacetyl]-(9C1) (CA INDEX NAME)

739367-71-6 HCAPLUS
Isoquinoline, 2-[[[2-][[25]-2-cyano-1-pyrrolidiny1]-2oxoethyl]aminolacetyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

739367-79-4 HCAPLUS
Quinoline, 1,2,3,4-tetrahydro-1-[[[2-oxo-2-(1-pyrrolidinyl)ethyl]amino]acetyl]- (9CI) (CA INDEX NAME)

739367-83-0 HCAPLUS Acetamide, 2-[(2-[(25)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-N-3-isoquinolinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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739367-72-7 HCAPLUS
Isoquinoline, 1,2,3,4-tetrahydro-2-{{{2-oxo-2-(3-thiazolidinyl)ethyl}amino}acetyl}- (9CI) (CA INDEX NAME)

739367-73-8 HCAPLUS
Isoquinoline, 1,2,3,4-tetrahydro-2-[[[2-oxo-2-(1-pyrrolidinyl)ethyl)amino]acetyl]- (9CI) (CA INDEX NAME)

739367-77-2 HCAPLUS
Quinoline, 1-[[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]acetyl]1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

739367-78-3 HCAPLUS
Quinoline, 1,2,3,4-tetrahydro-1-[[[2-oxo-2-{3-thiazolidinyl}ethyl]amino]acetyl]- (9CI) (CA INDEX NAME)

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

739367-84-1 HCAPLUS
Acetamide, N-3-isoquinolinyl-2-[[2-oxo-2-(3-thiazolidinyl)ethyl]amino]-(9CI) (CA INDEX NAME)

739367-85-2 HCAPLUS Acetamide, N-3-isoquinolinyl-2-[(2-oxo-2-(1-pyrrolidinyl)ethyl]amino)-(9CI) (CA INDEX NAME)

739367-89-6 HCAPLUS Acetamide, 2-[(2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-N-2-quinolinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

.RN 739367-90-9 HCAPLUS
CN Acetamide, 2-[[2-oxo-2-(3-thiazolidinyl)ethyl]amino]-N-2-quinolinyl-(9CI) (CA INDEX NAME)

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

739367-91-0 HCAPLUS Acetamide, 2-[[2-oxo-2-(1-pyrrolidinyl)ethyl]amino]-N-2-quinolinyl- (9CI) (CA INDEX NAME)

739367-95-4 HCAPLUS
Acetamide, 2-[[2-[(2S]-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-N-(2-methyl-4-quinolinyl)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

739367-96-5 HCAPLUS Acetamide, N-(2-methyl-4-quinolinyl)-2-{[2-oxo-2-(3-thiazolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) Absolute stereochemistry.

739368-01-5 HCAPLUS
Acetamide, N-(3-methyl-5-cinnolinyl)-2-[[2-0x0-2-(3-thiazolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME).

739368-02-6 HCAPLUS
Acetamide, N-{3-methyl-5-cinnolinyl}-2-[[2-0x0-2-{1-pyrrolidinyl}ethyl]amino}- (9CI) (CA INDEX NAME)

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

739367-97-6 HCAPLUS
Acetamide, N-(2-methyl-4-quinolinyl)-2-{{2-oxo-2-{1-pyrrolidinyl}ethyl}amino]- (9CI) (CA INDEX NAME)

739368-00-4 HCAPLUS Acctamide, 2-[(2-1(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-N-(3-methyl-5-cinnolinyl)- (9Cl) (CA INDEX NAME)

ANSWER 9 OF 20 HCAPLUS, COPYRIGHT 2007 ACS on STN (Continued)

739368-06-0 HCAPLUS
Acetamide, 2-{{2-{(2S)-2-cyano-1-pyrrolidiny1}-2-oxoethy1}amino}-N-{4-methy1-2-oxo-2H-1-benzopyran-7-y1}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

739368-07-1 HCAPLUS
Acctamide, N. (4-methyl-2-oxo-2H-1-benzopyran-7-yl)-2-[[2-oxo-2-(3-thiazolidinyl)ethyl]amino]- (9C1) (CA INDEX NAME)

739368-08-2 HCAPLUS Acctamide, N-(4-methyl-2-oxo-2H-1-benzöpyran-7-yl)-2-[[2-oxo-2-(1-pyrrolidinyl)ethyl]aminol- (9CI) (CA INDEX NAME)

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L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 739368-12-8 HCAPLUS
CN Acetamide, N-2-benzothiazolyl-2-[[2-[(2S)-2-cyano-1-pyrrolidinyl]-2oxoethyllamino] - [9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 739368-13-9 HCAPLUS CN Acetamide, N-2-benzothiazolyl-2-[{2-oxo-2-(3-thiazolidinyl)ethyl}amino]-(9CI) (CA INDEX NAME)

RN 739368-14-0 HCAPLUS
CN Acetamide, N-2-benzothiazolyl-2-[[2-oxo-2-(1-pyrrolidinyl)ethyl]amino]-(9c1) (CA INDEX NAME)

RN 739368-17-3 HCAPLUS
CN Acetamide, 2-[[2-(12S)-2-cyano-1-pyrrolidiny1]-2-oxoethyl]amino]-N-1H-purin-6-yl- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 739368-22-0 HCAPLUS
CN Acecamide, 2-[(2-[(25)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-N-[2-(methylthio)[1,2,4]triazolo[1,5-a]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 739368-23-1 HCAPLUS
CN Acetamide, N-{2-(methylthio)[1,2,4]triazolo[1,5-a]pyrimidin-7-yl]-2-[{2-oxo-2-(3-thiazolidinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 739368-18-4 HCAPLUS CN Acetamide, 2-[[2-0x0-2-(3-thiazolidinyl)ethyl]amino]-N-1H-purin-6-yl-(9CI) (CA INDEX NAME)

RN 739368-19-5 HCAPLUS
CN Acetamide, 2-[(2-oxo-2-(1-pyrrolidinyl)ethyl]amino]-N-1H-purin-6-yl(9C1)
(CA INDEX NAME)

L7 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 739368-24-2 HCAPLUS
CN Acetamide, N-{2-(methylthio) {1,2,4}triazolo(1,5-a}pyrimidin-7-yl}-2-[{2-oxo-2-{1-pyrrolidinyl}ethyl}amino}- (9CI) (CA INDEX NAME)

RN 739368-27-5 HCAPLUS
CN Quinoline, 1-[[[2-[(2S)-2-cyano-1-pyrrolidiny1]]-2-oxoethyl]amino]acetyl]decahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

739368-29-7 HCAPLUS
IH-Indole, 1:[3-[(2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-1-oxopropyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

L7 ANSMER 10 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
H, alkyl, and arylalkyl; RA and RB = alkyl, alkylcarbonyl,
alkylsulfonyl; or RA and RB taken together with the N to which they are
attached form a ring piperidine, piperazine and morpholine; and RC and RD
- H and alkyl.

ACCESSION NUMBER: 2004:267291 HCAPLUS

2004:267291 HCAPLUS

ACCESSION NUMBER: 2004:267291 HCAPLUS
DOCUMENT NUMBER: 140:303518

Preparation of N-aminoacyl
pyrrolidine-2-carbonitriles
and related compounds as inhibitors of dipeptidyl
peptidase-IV (DPP-IV) useful against type II diabetes
and other disorders

INVENTOR(S): Mader, David; Pei, Zhonghua; Pireh, Daisy; Djuric,
Stevan W., Niedeman, Paul E.; Yong, Kong; Feenstra,
Melissa J.; Kopecko, Hana; Li, Xiaofeng; Longenecker,
Kenton; Sham, Hing L.; Stewart, Kent D.;
Szczepankiewicz, Bruce G.

PATENT ASSIGNEE(S): Abbott Laboratories, USA
POT Int. Appl., 135 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT																
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WO	2004	0268	22		A2		2004	0401	1	WO 2	003-	US29	018		2	0030	915
WO	2004																
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	88,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,
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	RW:	GH,															
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											GW,						
US	2004	1219	64		A1		2004	0624	1	US 2	003 -	6598	60		2	00309	911
CA	2497	725			A 1		2004	0401		CA 2	003 -	2497	725		2	00309	915
AU	2003	2828	00		A1		2004	0408		AU 2	003 -	2828	00		2	00309	915
BR	2003 1560	0145	82		А		2005	0809	1	BR 2	003-	1458	2		2	00309	915
EP																	
	R:																
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CN	1703	399			A		2005	1130		CN 2	003-	8251	88		21	00309	915
JP	2006	5030	57		T		2006	0126		JP 2	004-	5378	31		21	00309	915
CN JP ZA IN PRIORITY	2005	0022	18		A		2005	0916	:	ZA 2	005-	2218			21	00503	316
- IN	2005	MNOO:	210		A		2005	0930		IN 2	005-1	MN21	0		21	0050	17
PRIORIT	/ APP	LN.	INFO	. :					1	JS 2	002-	2468	31		A 21	00209	919
									1	JS 2	002-	4120	84P	- 1	P 2	00209	919
									١	JS 2	003-	6598	60	1	A 21	00309	911
									1	<b>10</b> 2	003-1	JS29	018	1	¥ 20	00309	915

OTHER SOURCE(S): MARPAT 140:303518 Young, Shawquia, Page 16 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 01 Apr 2004

The present invention relates to N-aminoacyl pyrolidine-2-carbonitriles and related compds. (shown as I; variables defined below; e.g. II) that inhibit dipeptidyl peptidse IV (OPP-IV) and are useful for the

or treatment of diabetes, especially type II diabetes, as well as

prevention or treatment of diabetes, especially type II diabetes, as well as hyperslycemia, Syndrome X, hyperinsulinemia, obesity, atherosclerosis, and various immunomodulatory diseases (no data). Compds. I inhibit DPP-IV induced fluorescence with inhibitory consts. 0.014-7 µM. Although the methods of preparation are not claimed, >100 example prepns. are included. For example, II was prepared in 9 steps starting from Me (\$1.5)-2-pyrrolidome-5-carboxylate and involving intermediates di-Me (2S)-5-oxopyrrolidine-1,2-dicarboxylate, di-Me (2S)-5-(ctrimethylsily1)ethynyl)pyrrolidine-1,2-dicarboxylate, di-Me (2S)-5-((trimethylsily1)ethynyl)-1-prolinate, deeparated diastereomers). Me (\$R)-5-((trimethylsily1)ethynyl)-1-prolinate, (Me) (\$R)-1-[N-(tert-butoxycarbonyl)-L-leucyl]-5-cthynyl-1-prolinate, (SR)-1-[N-(tert-butoxycarbonyl)-L-leucyl]-5-ethynyl-1-prolinate, (SR)-1-[N-(tert-butoxycarbonyl)-R-(tert-butoxycarbonyl)-R-(tert-butoxycarbo

xxyalkyl, cyano, cyanoalkyl, formyl, halogen, haloalkyl, hydroxy, hydroxyalkyl, mercapto, nitro, Ph, RARBN-, RcRDNC(0)-, and RcRDNS(0)2-. R4, R5 and R6

L7 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 676560-65-9P 676560-68-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Usea)
(drug candidate; preparation of N-aminoacyl
pyrrolidine-2-carbonitriles and
related compds. as inhibitors of dipeptidyl peptidase-IV useful
against

LYDE II diabetes and other disporters)

type II diabetes and other disorders)
676560-65-9 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-{[[1,1-dimethyl-2-{4quinolinylamino|ethyl]amino|acetyl]-5-ethynyl-, (2S,5R)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry

676560-68-2 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[2-(2-benzothiazolylamino)-1,1-dimethylethyllamino]acetyl]-5-ethynyl-, (28,5R)- (9C1) (CA INDEX NAME)

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ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 22 Jan 2004 High-resolution crystallog, anal. of a complex of the serine-carboxyl proteinase sedolisin with pseudo-iodotyrostatin revealed two mols. of
                              inhibitor bound in the active site of the enzyme, marking subsites from
                             to S3'. The mode of binding represents two products of the proteolytic reaction. Substrate specificity of sedolisin was investigated using peptide libraries and a new peptide substrate for sedolisin, MCA-Lys-Pro-Pro-Leu-GlueTyr-Arg-Leu-Gly-Lys (DNP) -Gly, was synthesized based on the results of the enzymic and crystallog. studies and was shown to be efficiently cleaved by the enzyme. The kinetic parameters for the substrate, measured by the increase in fluorescence upon relief of quenching, were keat = 73:5 s-1, Km = 0.12;0.011 µM, and kcat/Km = 608:85 s-1 µM-1.
                                                                                                                                                    2004:51888 HCAPLUS
ACCESSION NUMBER:
                                                                                                                                                      140:283321
Two inhibitor molecules bound in the active site of Pseudomonas sedolisin: a model for the bi-product complex following cleavage of a peptide substrate Wlodawer, Alexander; Li, Mi; Güstchina, Alla; Oyama, Hiroshi; Oda, Kohei; Beyer, Bret B.; Clemente, Jose; Dunn. Ban M.
DOCUMENT NUMBER:
TITLE:
AUTHOR (S):
                                                                                                                                                       Hiroshi; Oda, Kohel; Beyer, Bret B.; Clemente, Jose Dunn, Ben M.
Macromolecular Crystallography Laboratory, Protein Structure Section, National Cancer Institute at Frederick, Frederick, MD, 21702, USA Biochemical and Biophysical Research Communications (2004), 314(2), 638-645
CODEN: BBRCA9; ISSN: 0006-291X
CORPORATE SOURCE:
SOURCE:
                                                                                                                                                       Elsevier Science
 PUBLISHER:
DOCUMENT TYPE:
   LANGUAGE:
                                                                                                                                                       English
                             676262-85-4
                          676262-85-4
RL: BSU (Biological study, unclassified): BUU (Biological use, unclassified): BIOL (Biological study); USES (Uses)
(anal. of substrate specificity using peptide libraries identifies novel fluoreacent substrate for Pseudomonas sedolisin)
676262-85-4 HCAPLUS
                676264-05-4 Increase
Glycine.
-{{(4-methyl-2-oxo-2H-1-benzopyran-7-yl}amino}carbonyl}-L-lysyl-
L-prolyl-L-prolyl-L-leucyl-L-ar-glutamyl-L-tyrosyl-L-arginyl-L-
leucylglycyl-N6-{2,6-dinitrophenyl}-L-lysyl- {9CI} (CA INDEX NAME)
Absolute stereochemistry.
                                    INSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
Intered STN: 09 May 2003
                                         C(O)CH-NHR2 I
                        The present invention relates to N-aminoacetyl-substituted pyrrolidines related compds. (shown as I; variables defined below; e.g. (25)-1-[[1,2,3,4-Tetrahydronaphthalen-1-ylamino]acetyl]pyrrolidine-2-carbonitrile) and pharmaceutically acceptable saits thereof. The compds. are useful for the treatment and/or prophylaxis of diseases which are associated with dispertidyl peptidase IV (DPP IV), such as diabetes, particularly noninsulin dependent diabetes mellitus, and impaired glucose tolerance. For I: R1 is H or CR; R2 is C(R31R4)(CH2)RR5.

C(R3,R4)CH20R7, or (un)substituted tetralinyl, tetrahydroquinolinyl or tetrahydroisoquinolinyl; R3 is H, lower-alkyl, benzyl, hydroxybenzyl or indolylmethylene; R4 is H or lower-alkyl, or R3 and R4 are bonded to each other to form a ring together with the C atom to which they are attached and -R3-R4-is -(CH2)2-5. R5 is (un)substituted 5-membered heteroaryl, bi- or tricyclic heterocyclyl, or aminophenyl; R6 is (un)substituted pyridinyl, pyrimidinyl, 5-membered heteroaryl or bi- or tricyclic heterocyclyl; R7 is (un)substituted aminophenyl, naphthyl or quinolinyl; as (CR3 R9) or S. R8 and R9 a N or Nower-alkyl, na 0.2 a adda desirable desirable.
heterocycly1; R7 is (un)substituted aminophenyl, naphthyl or quinolinyl; X

is (RR,R8) or S; R8 and R9 = H or lower-skyl, n = 0-2; addnl. details are given in the claims. Five pharmaceutical formulations are tabulated. ICSO values for inhibition of dipeptidyl peptidase IV are tabulated for 6 examples of [: eg. 0.00] LM for (2S)-1 [([1-dimethyl-2-(5-methyl-2-m-tolyl-1H-imidazol-4-yl)ethyl]amino]acetyl]pyrrolidine-2-carbonitrile. Example preprss. are given for 209 compds. I; for example. [(2S)-1][1,2,3,4-tetrahydronaphthalen-1-ylamino]acetyl]pyrrolidine-2-carbonitrile was obtained from 1-amino-1.2,3,4-tetrahydronaphthalene and (2S)-1-chloroacetylpyrrolidine-2-carbonitrile in THP.

ACCESSION NUMBER: 2003:356248 HCAPLUS
DCCUMENT NUMBER: 138:368754
TITLE: Preparation of N-aminoacetyl-substituted pyrrolidines as dipeptidyl peptidase IV inhibitors
Boehringer, Markus; Hunxiker, Daniel; Kuehne, Holger; Loeffler, Bernd Michael; Sarabu, Ramakenth; Wessel, Hans Peter
PATENT ASSIGNEE(S): P. Hoffmann-Ls Roche A.-G., Switz.
CODEN: PIXXD2
DOCUMENT TYPE: Patent LMNGUAGE: Patent LMNGUAGE: Patent English
PAMILY ACC. NUM. COUNT: 1
FAMILY 
DOCUMENT TYPE:
LANGUAGE:
PAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                                                                      DATE
                             PATENT NO.
                                                                                                                                                                                                                                                                       APPLICATION NO.
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WO 2003037327 A1 20030508 WO 2002-EP11711 20021018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

Young, Shawquia, Page 17

7 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-

REFERENCE COUNT: 24
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THERE ARE 24 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

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ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NO, NZ, OM, PR,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZM, ZW
RN: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, 1E, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, C1, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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  US 2005096348
PRIORITY APPLN. INFO.:
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EP 2001-125338
                                                                                                                                                                                                                                                                                                               A 20011026
                                                                                                                                                                                                                  EP 2002-18227
                                                                                                                                                                                                                                                                                                               A 20020821
                                                                                                                                                                                                                  US 2002-269519
                                                                                                                                                                                                                                                                                                               A3 20021014
                                                                                                                                                                                                                  WO 2002-EP11711
                                                                                                                                                                                                                                                                                                               W 20021018
OTHER SOURCE(S):

MARPAT 138:368754

IT 521268-39-3P, {2S}-1-[[[2-[(8H-Indeno[1,2-d]thiazol-2-yl)amino]ethyl]amino]acetyl]pyrrolidine-2-carbonitrile hydrochloride 521268-55-3P, {2S}-1-[[12-[(4,5,6,7-Tetrahydrobenzothiazol-2-yl)amino]ethyl]amino]acetyl]pyrrolidine-2-carbonitrile 521268-57-5P 521268-59-7P, (2S)-1-[[1,1-Dimethyl-2-[(5-acetyl-4,5,6,7-tetrahydrothiazolo[5,4-c]pyridine-2-yl)amino]ethyl]amino]acetyl]pyrrolidine-2-carbonitrile methanesulfonate 521268-62-2P, {2S}-1-[[(2-[(Benzothiazol-2-yl)amino]-1,1-dimethylethyl]amino]acetyl]pyrrolidine-2-carbonitrile 521268-64-4P, (2S)-1-[[(2-((Benzothiazol-2-yl)amino]ethyl]amino]acetyl]pyrrolidine-2-carbonitrile 521268-65-P, (2S)-1-[[(2-((Benzothiazol-2-carbonitrile 521268-65-P, (2S)-1-[(2-((Benzothiazol-2-carbonitrile 521268-65-P), (2S)-1-[(1-((Benzothiazol-2-carbonitrile 521268-65-P), (2S)-1-[(1-((Benzothiazol-2-carbonitrile 521268-65-P), (2S)-1-[(1-((Benzothiazol-2-carbonitrile 521268-67-P), (2S)-1-[(1,1-Dimethyl-1-((G-acetyl-4,5,6,7-2))]
  tetrahydrothiazolo[5,4-c]pyridine-2-yl)amino]ethyl]amino]acetyl]pyrrolidin
                       e-2-carbonitrile
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Usea)
(uses) (drug candidate; preparation of N-aminoacetyl-substituted pyrrolidines as dipeptidyl peptidase IV inhibitors) RN 521268-39-3 HCAPLUS
```

ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) 2-Pyrrolidinecarbonitrile, 1-[[[2-(8H-indeno[1,2-d]thiazol-2-ylamino]ethyl]amino]acetyl]-, hydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

•x HC1

521268-55-3 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[2-[(4.5,6,7-tetrahydro-2-benzothiazolyl]amino]ethyl]amino]acetyl]-, [25]- [9C1] (CA INDEX NAME)

Absolute stereochemistry.

521268-57-5 HCAPLUS
Thiazolo[5,4-c]pyridine-5(4H)-carboxylic acid, 2-[{2-[{2-[{2-}(2S)-2-cyano-1-pyrrolidiny]}-2-oxoethyl]amino]-2-methylpropyl]amino]-6,7-dihydro-, ethyl ester, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 521268-56-4 CMF C20 H30 N6 O3 S

Absolute stereochemistry.

CM 2

ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 521268-64-4 HCAPLUS
CN 2-Pyrrolidinecarbonitrile,
1-[[[2-(2-benzothiazolylamino)ethyl]amino]acety
1]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

Absolute stereochemistry.

521268-66-6 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[2-(2-benzoxazolylamino]-1,1-dimethylethyl]mino]ecetyl]-, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 521268-67-7 HCAPLUS
CN 2-Pyrrolidinecarbonitrile,
1-[[[1,1-dimethyl-2-([1-methyl-1H-benzimidazol2-yl)amino]ethyl]amino]acetyl]-, (2S)- (9CI) (CA INDEX NAME)

Young, Shawquia, Page 18

ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) CRN 75-75-2 CMF C H4 03 S

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521268-59-7 HCAPLUS
Thiazolo[5,4-c]pyridin-2-amine, 5-acetyl-N-[2-[{2-[(2S)-2-cyano-1-pyrrolidinyl]-2-oxoethyl]amino]-2-methylpropyl]-4,5,6,7-tetrahydro-, methaneaulfonate (9C1) (CA INDEX NAME)

CM 1

CRN 521268-58-6 CMF C19 H28 N6 O2 S

Absolute stereochemistry.

2

75-75-2 C H4 O3 S

521268-62-2 HCAPLUS 2-Pyrrolidinecarbonitrile, 1-[[[2-(2-benzothiazolylamino)-1,1-dimethylethyl]amino]acetyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

521269-41-0 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-{{{2-{(6-acetyl-4,5,6,7-tetrahydrothiazolof,4-c]pyridin-2-yl}amino]-1,1-dimethylethyl}amino]acetyl}-, (2S}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 04 Oct 2002

The invention relates to compds. RISO2NR2CHR3CH2CONNCHR4CH2C6H4R5-p [R1 = phenylviny], tetrahydronaphthyl, (un)substituted Ph, naphthyl, or certain heterocyclic radicals; R2 \* H, alkyl and R3 \* (un)substituted Ph or heterocyclyl or R2 \* (un)substituted Ph or heterocyclyl or R2 \* (un)substituted Ph or heterocyclyl and R3 \* H; R4 \* (thio)carbamoyl or acyl groups, (un)aubstituted Ph or heterocyclyl; R5 \* CH2NR1IR12 or CH2N(O)NR1IR12, where R11, R12 \* H, (cyclo)alkyl, hydroxyalkyl, etc.] which have an affinity for bradykinin receptors, with a selectivity for B1 receptors, and can be used to prepare medicaments

to treat or prevent persistent or chronic inflammatory diseases and inflammation pathologies. Thus, N-[1-(4-aminomethylbenzyl)-2-oxo-2-pyrrolidinoethyl)-3-(2-naphthalenylsulfonylamino)-3-phenylpropionamide (isolated as HCl salt) was prepared by coupling of

2-amino-3-(4-cyanopheny))-l-pyrrolidino-1-propanone trifluoroacetate with -3-(2-naphthalenyiaulfonylamino)-3-phenylpropionic acid, followed by reduction

of the cyano group by hydrogenation over Raney Ni. Synthesis of starting compda is described.

ACCESSION NUMBER: 2002:754370 HCAPLUS

DOCUMENT NUMBER: 137:279466

TITLE: Preparation of N-(arylsulfonyl)-β-amino acids having a substituted aminomethyl group and their pharmaceutical compositions

INVENTOR(S): Perrari, Bernard; Gougat, Jean; Muneaux, Yvette; Perreaut, Pierre; Sarran, Lionel

PATENT ASSIGNEE(S): Samofi-Synthelabo, Fr.

SOURCE: PCT Int. Appl., 195 pp.

DOCUMENT TYPE: Patent

Patent French

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
					~ • •	-									-		
WO	2002	0769	64		A1		2002	1003	1	WO 2	002-	FR10	59		2	0020	327
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BΑ,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	Cυ,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	J₽,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR.
		LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO.	NZ,	OM,	PH,
		PL,	PT,	RO.	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US.	UZ,	VN,	YU,	ZA,	ZM,	zw							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	ÇH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,	NÉ,	SN,	TD,	TG
FR	2822	827			A1		2002	1004		FR 2	001-	4315			2	0010	328
FR	2822	827			B1		2003	0516									
CA	2436	225			A1		2002	1003		CA 2	002-	2436	225		2	0020	327
EE	2003	0041	7		А		2003	1215		EE 2	003-	417			2	0020	327
EP	1373	233			A1		2004	0102		EP 2	002-	7243	83		2	0020	327
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IΕ,	SI,	LT,	LV,	FI,	RO,	MK,	CY.	AL.	TR						
BR	2002	0084	89		A		2004	0330		BR 2	002-	8489			2	0020	327

ANSWER 13 OF 20 HCAPLUS monohydrochloride (9CI) COPYRIGHT 2007 ACS on STN (CA INDEX NAME)

• HC1

464930-36-7 HCAPLUS
Propanamide, 3-[1,3-benzodioxol-5-yl][(2,4-dichloro-3-

methylphenyl)sulfonyl]amino]-N-[1-{{4-{(cyclopentylmethylamino)methyl]phen yl]methyl]-2-oxo-2-{1-pyrrolidinyl)ethyl}-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry

464931-54-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-{arylsulfonyl}-β-amino acids as pharmaceuticals)
46931-54-2 HCAPLUS
Propanamide, J-{1,3-benzodioxol-5-yl{(2,4-dichloro-3-

Young, Shawquia, Page 19

ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2007 ACS ON STN
ZA 2003006037 A 20040805 ZA 2003-6037
JP 2004525936 T 20040826 JP 2002-576224
CN 1541211 A 20041027 CN 2002-807539
HU 200401538 A2 20041129 HU 2004-1538
TW 233923 B 20055011 TW 2002-91106017
NZ 527429 A 20050930 NZ 2002-527429
US 2004116353 A1 20040617 US 2003-472674
US 7157454 B2 2007102
NO 2003004267 A 20031128 NO 2003-4267
BG 108201 A 20040930 BG 2003-108201 (Continued) 20020327 20020327 20020327 20020327 20030918 NO 2003-4267 BG 2003-108201 FR 2001-4315 20030924 BG 108201 PRIORITY APPLN. INFO,: 20040930 20030925 A 20010328 W 20020327 WO 2002-FR1059

OTHER SOURCE(S): MARPAT 137:279466
IT 464929-82-6P 464930-11-8P 464930-36-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)  $\begin{array}{ll} \text{(preparation of N-(arylsulfonyl)-}\beta\text{-amino acids as pharmaceuticals)} \\ \text{(preparation of N-(arylsulfonyl)-}\beta\text{-amino acids as pharmaceuticals)} \\ \text{(Acapus)} \\ \text{Propanamied, 3-(1,3-benzodioxol-5-yl[(2,4-dichloro-3-methylphenyl) sulfonyl] amino]-N-([1R)-1-([4-[(1,1-dichloro-3-methylphenyl)]methyl])-phyllographyl) \\ \text{(dimethylethyl)-methylmino]-methyl]phenyl]-2-oxo-2-(1-pyrrolidinyl)-thyl]-, monohydrochloride (9C1) (CA INDEX NAME) \\ \end{array}$ 

Absolute stereochemistry. Rotation (-).

● HC1

464930-11-8 HCAPLUS
Propanamide, 3-{1,3-benzodioxol-5-yl{(2,4-dichloro-3-methylphenyl)sulfonyl]amino]-N-{2-oxo-1-{[4-(1-piperidinylmethyl)phenyl]methyl}-2-{1-pyrrolidinyl}ethyl}-,

ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) methylphenyl)sulfonyl|amino|-N-[(1R)-1-[(4-cyanophenyl)methyl]-2-oxo-2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
Entered STN: 13 Sep 2002
Due to its role in regulating the cell cycle, Cdc25 (a family of dual
specificity phosphatases) is a potential target for therapies aimed at
controlling proliferative diseases, but rational, structure-based design
has not been possible because of the lack of accurate 3-dimensional data.
The present invention relates to polypeptides which comprises the ligand
binding domain of human Cdc25 proteins, crystalline forms of these
polypeptides, and the use of these crystalline forms to determine the
memsional

structure of the catalytic domain of Cdc25. In particular, a high

lution

crystal structure was obtained for the polypeptide denoted

CDC25B(ANBB), comprising residues Glu-368 through Arg-562 of human

Cdc25B, complexed with a pentapeptide inhibitor denoted cdc1249

(2-methoxynaphthyl-1-carboxy-(4-sulfomethyl)-L-Phe-L-Glu-L-Glu-L-Glu
naphthylalanine-L-Glu-amide). The invention also relates to the use of

the 3-dimensional structure of the Cdc25 catalytic domain in methods of

designing and/or identifying potential inhibitors of Cdc25 activity, for

example, compds. which inhibitors of Cdc25 activity, for example, compds.

which inhibit the binding of a native substrate to the Cdc25 catalytic

domain. The syntheses and structures of a large number of putative

pentapeptide inhibitors are also provided. Such inhibitors have

ntial

in the treatment of diseases associated with excessive cellular proliferation, such as cancer, restenosis, reocclusion of coronary

artery, and inflammation.

ACCESSION NUMBER: 2002:696111 HCAPLUS 137:228607

DOCUMENT NUMBER:

Crystal structure and three-dimensional structure of human Cdc25 catalytic domains and its use in

designing

INVENTOR (S):

peptidomimetic inhibitors
Taylor, Neil R.; Borhani, David; Epstein, David;
Rudolph, Johannes; Ritter, Kurt; Fujimori, Taro;
Robinson, Simon; Eckstein, Jens; Haupt, Andreas;
Walker, Nigel; Dixon, Richard W.; Choquette, Deborah;
Blanchard, Jill; Kluge, Arthur; Pal, Kollol;
Bockovich, Nicholas; Come, Jon; Hediger, Mark
BASF Aktiengesellschaft, Germany; GPC Biotech Inc.
PCT Int. Appl., 351 pp.
CODEN: PIXXD2
Patent
English

PATENT ASSIGNEE(S):

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. 070680 A1 20020912 W0 2001-US6587 20010301
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MN, MX, MZ, NO, NZ, PL, PT, RO,
U, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, WO 2002070680

ANSWER 14 OF 20 HCAPLUS. COPYRIGHT 2007 ACS on STN (Continued)

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L7 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: CH, GM, KE, LS; RW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CP, CG, CI, CM, GA, GN, GW, MR, MR, NE, SN, TD, TG
PRIORITY APPLN: INFO: WO 2001-US6557 20010301

OTHER SOURCE(S): IT 457888-93-6P MARPAT 137:228607

45/888-93-67
REL SPN (Synthetic preparation); PREP (Preparation)
(crystal structure and three-dimensional structure of human Cdc25
catalytic domains and its use in designing peptidomimetic inhibitors)
45/888-93-6 HCAPLUS

L-Norvalinamide, N-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-4-

(sulfomethyl)-L-phenylalanyl-L-norvalyl-2-methyl-L-prolyl-3-benzo[b]thien-3-yl-L-alanyl-5-carboxy-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

CO2H

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 05 Jul 2002

AB Title compds. [I; Q = CH2. S; R = H, (S)-CN; B = CH2CO, COCH2. CO; YXW = NHCH2CH2NH, NH (CH2) 3NH, NHCH2C (CH3) 2NH, 1-(4-methyl-piperidine-4-amino)-yl, 1-(1-aminomethylycylopropyl) amino, 4-NhCH2CSH4CH2NH, N(CH3) (CH2CH2N(CH3), 1, 4-piperazinyl, 1-piperidinyl-4-amino, N(CH3) CH2C(CH3) 2NH; Z = optionally substituted 1-pyrrolidinyl, optionally substituted 3-thiazolidinyl, optionally substituted 3-thiazolidinyl, optionally substituted 3-thiazolidinyl, etc. 1 and pharmacol. acceptable salts of title compds. are prepared as dipeptidyl peptidase IV inhibitors. Title compds. are useful as antidiabetics, antisids agents, antistretriosclerosis, antihyperglycinemia agents, and as remedies for hyperglycinemia, hyperinsulinism, etc. in combination with related remedies as G1-262570, KAD1229, etc. Thus, the title compound II was prepared and in vivo tested for DPP-IV inhibition with . with

2002:504782 HCAPLUS

IC50 = 11 nmol/L. ACCESSION NUMBER:

DOCUMENT NUMBER: TITLE:

Preparation of aminocarbonylpyrrolidine derivatives dipeptidyl peptidase IV inhibitors

INVENTOR (S):

dipeptidyl peptidase IV inhibitors
Matsuno, Kenji: Ueno, Kimihisa: Iwata, Yasuhiro;
Matsumoto, Yuichi; Nakanishi, Satoshi; Takasaki,
Kotaro; Kusaka, Hideaki; Nomoto, Yuji; Ogawa, Akira
Kyowa Hakko Kogyo Co., Ltd., Japan
PCT Int. Appl., 196 pp.
CODEN: PIXXD2

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
                                                                                                                                                                                               (Continued)
                  PATENT NO.
                                                                                                                                         APPLICATION NO
                                                                                                    DATE
                                                                                                                                                                                                                 DATE
                                         051836 A1 20020704 W0 2001-JP11578
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, F1, GB,
M, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC,
LT, LU, LV, MA, MD, MG, MK, MN, MN, MX, MZ, NO, NZ,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR,
UG, US, UZ, VN, YU, ZA, ZM, ZM, AM, AZ, BY, KG, KZ.
                  WO 2002051836
                                                                                                                                                                                                                  20011227
  TM
                           RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
2433090 A1 20020704 CA 2001-2433090 20011227
154882 A1 20031022 EP 2001-271892 20011227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT.
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
20041B0925 A1 20040916 US 2003-465519 20031110
APPLN. INFO.: JP 2000-39844 A 20001227
                 CA 2433090
EP 1354882
                  US 2004180925
                                                                                                                                         US 2003-465919
JP 2000-398441
  PRIORITY APPLN. INFO.:
                                                                                                                                        JP 2001-261409
                                                                                                                                                                                                       A 20010830
                                                                                                                                         WO 2001-JP11578
                                                                                                                                                                                                        W 20011227
OTHER SOURCE(S): MARPAT 137:78968

IT 440099-71-8P 440099-73-0P 440099-75-2P
440099-77-4P 440099-78-5P 440099-79-6P
440099-80-9P 440099-81-0P 44009-82-1P
440100-28-7P 440100-30-1P 440100-31-2P
440100-33-4P 440100-78-7P 440100-80-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aminocarbonylpyrrolidine derivs. as dipeptidyl peptidase IV % \left\{ \mathbf{r}^{\prime}\right\} =\left\{ \mathbf{r}^{\prime}\right\} 
peptions IV
inhibitors)

RN 440099-71-8 HCAPLUS
CN 2-Pyrrolidinecarbonitrile,
1-[[(2-(2-quinoxalinylamino)ethyl)amino)acetyl)-
, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)
  Absolute stereochemistry.
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ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) 440099-75-2 HCAPLUS 2-Pyrrolidinecarbonitrile, 1-[[[2-[(6,7-dimethoxy-4-quinazolinyl)amino]ethyl]amino]acetyl]-, (2S)-, dimethanesulfonate (9CI) (CA INDEX NAME)

440099-77-4 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[{{2-{{1-(4-pyridinyl)-4-quinazolinyl}amino}ethyl}amino]acetyl}-, {2S}-, dimethanesulfonate (9CI) {CA INDEX NAME}

(Continued)

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

●2 HC1

440099-73-0 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[{[2-{(4-chloro-1-phthalaziny1)amino}ethyl]amino]acetyl]-, (2S)-, dimethanesulfonate (9CI) (CA INDEX NAME)

CRN 440099-72-9 CMF C17 H19 C1 N6 O

Absolute stereochemistry

СМ 2

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) CRN 440099-76-3 CMF C22 H23 N7 O

Absolute stereochemistry.

2 CM

CRN 75-75-2 CMF C H4 03 S

RN 440099-78-5 HCAPLUS
CN 2-Pyrrolidinecerbonitrile,
1-[[[2-(2-quinolinyl]amino]ethyl]amino]acetyl]-,
dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

440099-79-6 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-{{{2-{(4-methyl-2-quinolinyl) eminolethyl} aminolethyl} aminolethyl aminoleth

Absolute stereochemistry.

RN 440099-80-9 HCAPLUS
CN 2-Pyrrolidinecarbonitrile,
1-[[[2-(4-quinolinylamino)ethyl]amino]acetyl]-,
dihydrochloride, (25)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 440099-81-0 HCAPLUS
CN 2-Pyrrolidinecarbonitrile,
1-[[[2-(1-isoquinolinylamino)ethyl]amino]acetyl

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

●2 HC1

440100-30-1 HCAPLUS
2-Pyrrolidinecerbonitrile, 1-[[[1,1-dimethyl-2-(2-quinollinylamino]ethyl]amino]acetyl]-, (2S)-, (2E)-2-butenedioate (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 440100-29-8 CMF C20 H25 N5 O

CM 2

Double bond geometry as shown

440100-31-2 HCAPLUS
2-Pyrrolidinecerbonitrile, 1-[[[2-(1-isoquinolinylamino)-1,1-dimethylethyl]amino]acetyl]-, dihydrochloride, (25)- (9CI) (CA INDEX

Absolute stereochemistry.

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN )-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

●2 HC1

RN 440099-82-1 HCAPLUS
CN 2-Pyrrolidinecarbonitrile,
1-[[[2-(2-benzothiazolylamino)ethyl]amino]acety
1]-, dihydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

440100-28-7 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[1,1-dimethyl-2-(2-quinoxalinylamino)ethyl]amino]acetyl]-, dihydrochloride, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

●2 HC1

440100-33-4 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-([[1,1-dimethyl-2-(4-quinolinylamino)ethyl]amino]acetyl]-, (2S)-, (2E)-2-butenedioate (1:1)
(9CI) (CA INDEX NAME)

CM 1

Absolute stereochemistry.

Double bond geometry as shown.

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) 440100-78-7 HCAPLUS 2-Pyrrolidinecerbonitrile, 1-{{[2-{(4-chloro-1-phthalaziny1)amino}-1,1-dimethylethyl]amino]acetyl}-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 440100-77-6 CMF C19 H23 C1 N6 O

Absolute stereochemistry

2

Double bond geometry as shown.

440100-80-1 HCAPLUS
2-Pyrrolidinecarbonitrile, 1-[[[1,1-dimethyl-2-(1-phthalazinylamino|acetyl]-, (2S)-, (2E)-2-butenedioate (1:1)
(9C1) (CA INDEX NAME)

CM 1

CRN 440100-79-8 CMF C19 H24 N6 O

Absolute stereochemistry.

L7 ED AB

ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 12 May 2000
The reaction product of the tetrapeptide tuftsin (sequence TKPR) with 3-hydroxykynurenine (3HK) was examined and evidence was presented that the

mechanism of formation of a benzoxazole cross-linked peptide dime by  $3{\rm H}{\rm K}$  was not restricted to a glycyl N-terminus. This result suggested that

SHK

Can react with any peptide that has a free N-terminus, regardless of the identity of the amino acid (except proline). This finding suggests that the ubiquity of this cross-link in disease states such as cataract is potentially much greater than previously thought.

ACCESSION NUMBER: 2000:309265 HCAPLUS
DOCUMENT NUMBER: 133:150877

TITLE: A general mechanism of polypeptide cross-linking by 3-hydroxykynurenine
AUTHOR(S): Aquilina, J. A.

CORPORATE SOURCE: Australian Cataract Research Foundation, University of

SOURCE:

AUTHOR(S): CORPORATE SOURCE: of

Wollongong, New South Wales, 2500, Australia Redox Report (1999), 4(6), 323-325 CODEN: RDRPE4; ISSN: 1351-0002 Maney Publishing Journal English CASREACT 133:150877

Absolute stereochemistry.

PAGE 1-A

ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

110-17-8 C4 H4 O4

Double bond geometry as shown

HO<sub>2</sub>C

REFERENCE COUNT:

THERE ARE 33 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

-со2н

REFERENCE COUNT:

FORMAT

(CH<sub>2</sub>)<sub>4</sub>

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

PAGE 1-B

ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 25 Nov 1998
The present paper describes the total chemical synthesis of the precursor mol. of the Acquores green fluorescent protein (GPP). The mol. is made

of 238 amino acid residues in a single polypeptide chain and is nonfluorescent. To carry out the synthesis, a procedure, first described in 1981 for the synthesis of complex peptides, was used. The procedure

based on performing segment condensation reactions in solution while providing maximum protection to the segment. The effectiveness of the procedure has been demonstrated by the synthesis of various biol. active peptides and small proteins, such as human angiogenin, a 123-residue protein analog of RNase A, human midkine, a 121-residue protein, and pleiotrophin, a 136-residue protein analog of midkine. The GPP precursor mol. was synthesized from 26 fully protected segments in solution, and

final 238-residue peptide was treated with anhydrous HF to obtain the precursor mol. of GFP containing, two Cys(acetamidomethyl) residues.

removal of the acetamidomethyl groups, the product was dissolved in 0.1 M Tris-HCl buffer (pH 8.0) in the presence of DTT. After several hours at room temperature, the solution began to emit a green

fluorescence
(\lambda max = 509 nm) under near-UV light. Both fluorescence excitation
and fluorescence emission spectra were measured and were found to have

same shape and maxima as those reported for native GFP. The present results demonstrate the utility of the segment condensation procedure in synthesizing large protein mols. such as GFP. The result also provides evidence that the formation of the chromophore in GFP is not dependent on any external cofactor. ACCESSION NUMBER: 1998:745286 HCAPLUS

DOCUMENT NUMBER: TITLE: 130:110638

AUTHOR(S):

130:110638
Chemical synthesis of the precursor molecule of the Aequorea green fluorescent protein, subsequent folding, and development of fluorescence Nisiuchi, Yuji; Inui, Tatsuya; Nishio, Hideki; Bodi, Jozsef; Kimura, Terutoshi; Tsuji, Frederick T.; Sakakibara, Shumpei Protein Res. Found., Peptide Inst., Minoh-shi, Osaka, 562, Jana

CORPORATE SOURCE:

SOURCE: Proceedings of the National Academy of Sciences of

United States of America (1998), 95(23), 13549-13554 CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences

PUBLISHER:

DOCUMENT TYPE:

LANGUAGE: 219541-85-2P

219541-85-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(chemical synthesis of the precursor mol. of the Aequorea green
fluoreacent protein, subsequent folding, and development of
fluorescence)

219541-85-2 HCAPLUS

ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

PAGE 2-A

PAGE 2-B

REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

Young, Shawquia, Page 24

ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued) L-Proline, N-[(1,1-dimethylethoxy)carbonyl]-O-(phenylmethyl)-L-seryl-L-valyl-N-9H-xanthen-9-yl-L-glutaninyl-L-leucyl-L-alanyl-L-d-separtyl-1-[(phenylmethoxy)methyl]-L-histidyl-O-(1-ethylpropyl)-L-tyrosyl-N-9H-

xanthen-9-yl-L-glutaminyl-N-9H-xanthen-9-yl-L-glutaminyl-N-9H-xanthen-9-yl-L-asparaginyl-O-(phenylmethyl)-L-threonyl-, 6-cyclohexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L7 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AB A series of new spiroglumide amido acid derivs. was synthesized and evaluated for their ability to inhibit the binding of cholecystokinin (CCK) to guinea pig brain cortex (CCKB receptors) and peripheral rat pancreatic acini (CCKA receptors), as well as to inhibit in vitro the gastrin-induced Ca2+ increase in rabbit gastric parietal cells. Appropriate chemical manipulations of the structure of spiroglumide (CR 2194), i.e.,

(R) -4-(3,5-dichlorobenzamido)-5-(8-azaspiro[4.5]decan-8-yl)-5-oxopentanoic acid, led to potent and selective antagonists of CCKB/gastrin

receptors. Structure-activity relationships are discussed. receptors. Structure-activity relationships are discussed. Some of

new derivs., as, for example, compound 54 (CR 2622), i.e.,

(S)-4-[(R)-4'-[(3,5-dichlorobenzoyl)amino]-5'-(8-azaspiro[4.5)decan-8-yl)-5'-0x0-pentanoyl)amino]-5-(1-naphthylamino)-5-0xopentanoic acid, exhibit activity 70-170 times greater than that of spiroglumide, depending upon the model used (ICS0 = 2+10-8 vs. 140+10-8 mol in binding inhibition of [3H]-N-Me-N-Le-UCCK-8 in guinea pig brain cortex and ICS0 = 0.7+10-8 vs. 122.3+10-8 mol in inhibition of gastrin-induced Ca2+ mobilization in parietal cells of rabbit, resp.). Computer-assisted conformational anal studies were carried out to compare the chemical structure of both the agonist (pentagastrin) and the antagonist (54).

ACCESSION NUMBER: 1995:982948 HACPLUS
DOCUMENT NUMBER: 1995:982948 HACPLUS
STUCTURE-ANTIGASTIN ACTIVITY Relationships of New

DOCUMENT NUMBER: TITLE:

AUTHOR (S):

124:21939
Structure-Antigastrin Activity Relationships of New
Spiroglumide Amido Acid Derivatives
Makovec, Francesco: Peris, Walter; Frigerio, Sandra;
Giovanetti, Roberto; Letari, Ornella; Mennuni, Laura;

Revel, Laura

Revel, Laura Rotta Research Laboratorium, Milan, 20052, Italy Journal of Medicinal Chemistry (1996), 39(1), 135-42 CODEN: JMCMAR: ISSN: 0022-2623 CORPORATE SOURCE: SOURCE:

PUBLISHER: American Chemical Society

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S):

English CASREACT 124:21030

IT 171202-85-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological

ogical study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(atructure-activity relationships of new spiroglumide amido acid deriva. as antagonists of CCK/gastrin receptors)
171202-85-0 KCAPLUS
1H-Indole-1-pentanoic acid, y-[[5-(8-azaspiro[4.5]dec-8-yl)-4-[(3,5-dichlorobenzoyl)amino]-1,5-dioxopentyl]amino]-2,3-dihydro-8-oxo-,
[R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 02 Mar 1993

AB Condensation of 9-acridinamine with 6-chloro-2,4-pyrimidinediamine gave the (acridinylamino)pyrimidinediamine I (90% yield). Reaction of Me (9-acridinyl)carbamate with hydroxylamine hydrochloride gave the acridinyl(hydroxylurea II 95% yield). The cytotoxic activity of I and II was tested against Ehrlich sacites tumor cells.

ACCESSION NUMBER: 1991:80888 HCAPLUS

DOCUMENT NUMBER: 118:80888

TITLE: Synthesis of certain 9-(substituted amino)acridines as

potential antitumor agents Youssef, Khairia M.; El-Badry, Ossama M.; Abdou, AUTHOR(S): Nadia

A.; Kandell, Manal M.
Fac. Pharm.. Cairo Univ., Cairo, Egypt
Alexandria Journal of Pharmaceutical Sciences (1992),
6(2), 168-71
CODEN: AJPSES: ISSN: 1110-1792
JOURNAL
English
CASREACT 118:80888

ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

28/03/2007,10541108IIa.trn ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Entered STN: 12 May 1984 
RXZZICR1(YR2)NR3CHR4CONSCR6R7Y1R8 (R = aryl, heterocyclic group, Z = bond; R = aryl, heterocyclic group, H, halo, OH, NH2, guanidino, SH, CONH2, or their substituted derivs., Z = C1-15 alkylene, C2-15 alkenylene, C2-15 alkylene, C3-15 cycloalkenylene; X = C0, CH(OH), or their substituted deriva.; Z1 = alkylene, alkenylene, talkylidene; R1 = H, substituted derivs.; Z1 = alkylene, alkenylene, alkylidene; R1 = H, alkyl, YR2; Y, Y1 = CO. CH2; R2, R8 = OH, NH2, or their substituted derivs.; R3 = H, alkyl, cerbonyl-containing group; R4 = H, (un)substituted alkyl; R5 = H, alkyl, aralkyl; R6 = H, aryl, heterocyclic group, alkyl, aralkyl, hydroxyalkyl, heterocyclic-substituted alkyl; R5R6 = C2-5 alkylene or alkenylene or their oxa, thia, or aza deriva, or their OH- or oxo-substituted deriva; R7 = H, alkyl, Y1R8; R6R7 = C2-5 alkylene) were prepared as antihypertensives due to their ability to inhibit angiotensin-converting enzyme (no data). Thus, H-Ala-Pro-OCMe3 was treated with trans-PhCOCHCOCXMe3 in CH2C12 for 18 h to give PhCOCH2CH(COZH)-Ala-Pro-OCMe3 which was deblocked by CF3CO2H to give PhCOCH2CH(COZH)-Ala-Pro-OH-CF3CO2H.

ACCESSION NUMBER: 1998:32015 HCAPLUS
DOCUMENT NUMBER: 100:23015

Amide derivatives PROCHZCH (CO2H
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE: 100:23015
Amide derivatives
Preston, John; Carling, William Robert
Imperial Chemical Industries PLC, UK
Eur. Pat. Appl., 92 pp.
COOEN: EPXXDW DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 84941	A1	19830803	EP 1983-300169	19830113
EP 84941	B1	19870311		
R: AT, BE, CH,	DE, FR.	GB, IT,	LI, LU, NL, SE	
AU 8310341	A	19830728	AU 1983-10341	19830113
AU 563149	B2	19870702		
AT 25850	T	19870315	AT 1983-300169	19830113
ZA 8300273	A	19831026	ZA 1983-273	19830114
HU 27395	A2	19831028	HU 1983-163	19830119
HU 189637	В	19860728		
US 4528282	A	19850709	US 1983-459143	19830119
FI 8300186	A	19830723	FI 1983-186	19830120
DK 8300238	A	19830723	DK 1983-238	19830121
NO 8300203	A	19830725	NO 1983-203	19830121
JP 58134075	A	19830810	JP 1983-7516	19830121
ES 525684	A1	19850701	ES 1983-525684	19830916
ES 525685	A1	19850701	ES 1983-525685	19830916
PRIORITY APPLN. INFO.:			GB 1982-1832 A	19820122
			EP 1983-300169 A	19830113
<b>\</b>				

ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

2 CRN 76-05-1 CMF C2 H F3 O2

88098-54-8 HCAPLUS L-Proline, 1-[N-15-(2-benzofuranyl)-1-carboxy-5-oxopentyl}-L-alanyl]-, (S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1 CRN 88098-53-7 CMF C22 H26 N2 O7

2

RN 88098-75-3 HCAPLUS
CN L-Proline,
1-[N-[1,1-bis](1,1-dimethylethoxy)carbonyl]-4-(1H-indol-3-yl)-4oxobutyl]-L-slanyl]-, 1,3-dimethylethyl ester (SCI) (CA INDEX NAME)

Young, Shawquia, Page 26

L7 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
OTHER SOURCE(S): MARPAT 100:23015
IT 88098-19-59
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or resgent)
(preparation and deblocking of)
RN 88098-19-5 HCAPLUS
CD L-Proline, 1-(N-[1-[(1,1-dimethylethoxy)carbonyl]-3-(1H-indol-3-yl)-3-coxopropyl]-L-alanyl]-, 1,1-dimethylethyl eater (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OBu-t

88098-20-8P 88098-21-9P 88098-54-8P 88098-75-3P 88098-84-4P 88122-41-2P 88196-62-7P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
88098-20-8 HCAPLUS
L-Proline, 1-[N-[1-carboxy-3-(1H-indol-3-yl)-3-oxopropyl]-L-alanyl]-(9CI) (CA INDEX NAME)

88098-21-9 HCAPLUS L-Proline, 1-[N-[1-carboxy-3-(1H-indol-3-yl)-3-oxopropyl]-L-alanyl]-, mono(trifluoroacetate) (9CI) [CA INDEX NAME)

CM 1 CRN 88098-20-8 CMF C20 H23 N3 O6

L7 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN Absolute stereochemistry. (Continued)

88098-84-4 HCAPLUS L-Proline, 1-[N2-{1-carboxy-3-(1H-indol-3-y1)-3-oxopropy1]-L-lysy1]-

Absolute stereochemistry.

88122-41-2 HCAPLUS
L-Proline, 1-[N-[1-(ethoxycarbonyl)-3-(1H-indol-3-yl)-3-oxopropyl]-L-alenyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

88196-62-7 HCAPLUS L-Proline, 1-[N-[5-(2-benzofurany1)-1-carboxy-5-oxopenty1]-L-alany1]-, (R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 88196-61-6

L7 ANSWER 20 OP 20 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued CMF C22 H26 N2 O7

CM 2

CRN 76-05-1 CMF C2 H F3 O

P-C-CO2H